

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

1-11 (cancelled).

12. (Previously presented) The machine as claimed in claim 21, further comprising a condenser area where said closed line system is thermally coupled to the cold surface of said refrigeration unit.

13. (Previously presented) The machine as claimed in claim 12, wherein the discrete coolant areas are thermally conductively connected over a large area to the stator parts to be cooled.

14. (Previously presented) The machine as claimed in claim 13,
wherein said stator has a laminated core, and
wherein the discrete coolant areas are formed between laminates of the laminated core of said stator.

15. (Previously presented) The machine as claimed in claim 12, wherein the discrete coolant areas are formed as cooling channels.

16. (Previously presented) The machine as claimed in claim 15, further comprising flow paths for air cooling.

17. (previously presented) The machine as claimed in claim 21, wherein the discrete coolant areas are thermally conductively connected over a large area to the stator parts to be cooled.

18. (Previously presented) The machine as claimed in claim 17,

wherein said stator has a laminated core, and
wherein the discrete coolant areas are formed between laminates of the laminated core
of said stator.

19. (Previously presented) The machine as claimed in claim 21, wherein the discrete
coolant areas are formed as cooling channels.

20. (Previously presented) The machine as claimed in claim 19, further comprising flow
paths for air cooling.

21. (Currently amended) An electrical machine, comprising:
a rotor rotatably mounted;
a stator associated with said rotor in a stationary position and containing a stator winding;
and
a cooling device, cooling at least parts of said stator, including
a refrigeration unit comprising at least one cold head having at least one cold
surface; and
a closed line system containing:
a coolant supply line and a coolant return line at axial ends of the stator winding;
a coolant, thermally coupled to the cold surface, and
said line system thermally coupling said cold head to the heat generating parts of
said stator to be cooled with the stator winding, having discrete coolant areas associated
with the heat generating parts of said stator to be cooled,
wherein the heat generating parts of said stator are located at a geodetic lower
level than the cold surface,
and in which a coolant is circulated by a thermosiphon effect with boiling and
vaporization, the coolant being heated or at least partially vaporized in the discrete
coolant areas.